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**SYNTAXIS MOSESIANI SALA;  
A NEW SYNTAXIS FROM SOUTHERN CALIFORNIA**

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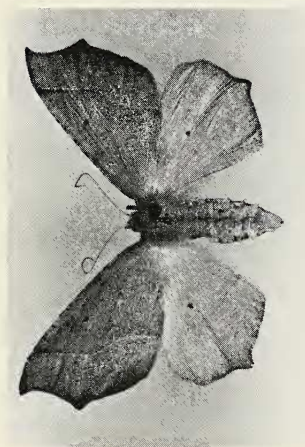
THE GENUS *Syntaxis* is well-represented in southern California, but relatively little-known because all species but one are active adults in the latter part of autumn, the lone exception being *Syntaxis cervinaria*. Pack., which flies in June. The arrival of October is the signal for *S. hirsuitaria* B. & McD. to break its summer diapause. Along with the bulk of the October-active insects, it is taken at light in this period. November is the chosen time for *S. formosa* Hulst, and for this reason it is less well-known in collections.

But the end of November and early December is yet another discrete seasonal period which yet another member of the *Syntaxis* has chosen as its own. This species is unlike any of the others, but may be confused with both *S. cervinaria* and *S. hirsuitaria*, which it superficially resembles. It has escaped notice, in all probability because of its singular period of flight; early in the dusk of Nov. and Dec. evenings just prior to the first rains of the winter in southern California.

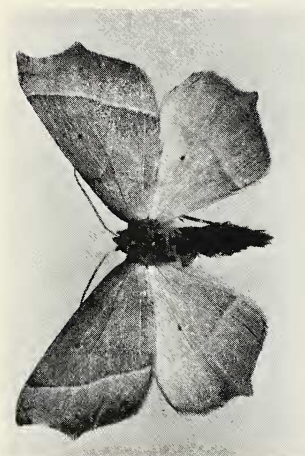
***Syntaxis mosesiani* sp. nov.**

*Syntaxis mosesiani*; ranges throughout the lower chaparral belt (elevation 2000-3000 feet) of southern California, where its chosen foodplant, *Lonicera hispidula* Douglas (California honeysuckle), occurs. Thus, bases of canyons opening to the coastal, western flatlands are the places to find this species, on the wing in late November and early December.

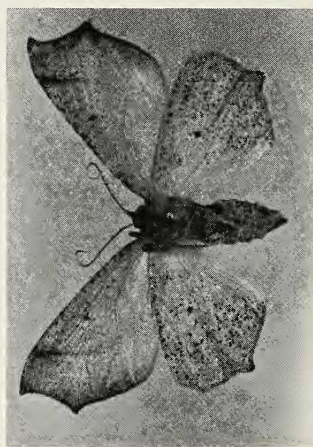
Male: Head with vertex tan; palpi tan; eyes black; tongue light tan, functional; antennae filiform, but with outer margin of antennal segments serrate, giving an appearance distinct from all other California *Syntaxis*. Thorax tan above and below, clothed throughout with hairy scales, darker dorsad; legs tan to distal



2



1



4



3

Fig. 1.—*Synaxis mosesiani* sp. nov., Holotype male, upper facies.  
 Fig. 2.—*Synaxis mosesiani* sp. nov., Allotype female, upper facies.  
 Fig. 3.—*Synaxis mosesiani* sp. nov., Holotype female, lower facies.  
 Fig. 4.—*Synaxis mosesiani* sp. nov., Allotype male, lower facies.

joint of femur, then black to tips of tarsal joints, whitish ring of scales at joints, metathoracic legs lighter than other four. Abdomen unicolorous tan, darker dorsad.

Upper surfaces of Wings — primaries: Ground color is unicolorous tan-brown (occasional specimens have a deep russet overlay of color; these forms look like-resemble *S. cervinaria*); basic wing shape and outline are typical of the genus, being angulate on distal margin, outer margin area extended at terminus of vein M-1; t.a. line usually present as an indistinct shading of darker scales, perpendicular to anterior margin, angled mesad with apex at M-1, continuing irregularly to terminus perpendicular to anal margin (some specimens have t.a. line as indistinct entity to only suggested); t.p. line is always present, being a line approximating a parallel to the outer margin, if it (the margin) were not angulate, straight to M-1, then curved, first mesad, then distad, to terminate at curve of anal margin, coloring darker mesad to lighter distad throughout; discal mark is a finely discrete black-brown spot, quite faint on some specimens; s.t. line is represented by a few scattered black scales near apical margin, often not represented at all.

Upper surface of wings — secondaries: Ground color tan, lighter than primary, unicolorous; t.p. line is only maculation, often incomplete to occasionally only suggested; discal spot always present, black, elongate-round.

Lower surface of wings — primaries: Ground color tan, lighter than upper surface, especially in overlap areas, peppering of black scales (especially in the russet form), darker along costal margin; t.a. line absent; t.p. line always present, often indistinct on posterior third of wing; discal spot always present, but less distinct than on upper surface.

Lower surface of wings — secondaries: Ground color much same as darker portions of primaries, peppering of black varies from none to very marked; t.a. line absent; t.p. line present, often incomplete posteriad; discal spot present, black, round, often more pronounced than at all other locations.

Length of Span of Wings: 41 to 43 mm, measured across tips of angulate apex of distal margin (note scale and figures 1 - 4.); holotype 41mm.

Female: Head like male except for antennae, which are more filliform, and segment serrations are less distinct. Thorax same. Abdomen shows some peppering of black scales, especially when full of eggs.

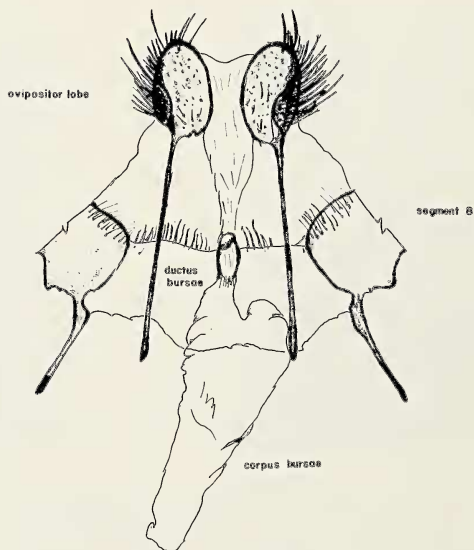
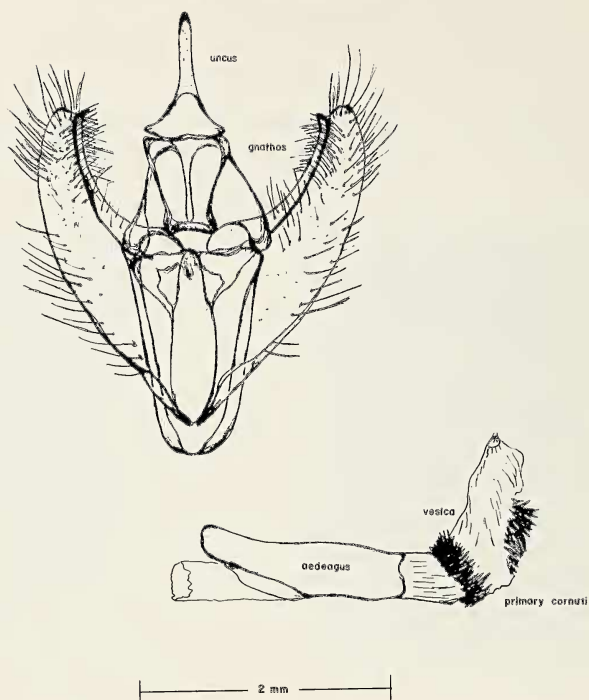


Fig. 5.—a. *Synaxis mosesiani* sp. nov., male genitalia (aedeagus removed),  
b. aedeagus, vesica expanded.

Fig. 6.—*Synaxis mosesiani* sp. nov., female genitalia.



Upper surface of wings — primaries: Ground color much same as male, always with some traces of tauny scaling, and contrasting of color less than for the male; t.a. line indistinct to absent; t.p. line always present, but often incomplete — always less well defined than on the male, always more wavy; discal spot always present subequal to that of male.

Upper surface of wings — secondaries: Ground color tan, lighter than primary, unicolourous; t.p. line is only maculation, is often incomplete occasionally only suggested; discal spot present, black, elongate-round.

Lower surface of wings — primaries: Ground color tan, darker on anterior two thirds, flecked with peppering of black scale spots, less where secondaries overlap, generally moreso than for the male; t.a. line absent; t.p. line present on anterior third only, occasionally absent; discal spot present, black, round.

Lower surface of wings — secondaries: Ground color tan, without maculation, save for variable peppering of black patches of scales which are very noticeable in some specimens; discal spot black, always present.

Length of span of wings: 40.5 mm (allotype), varies highly to a minimum of 34 mm for collected imagines, usually smaller than male.

Male genitalia (fig. 5): Uncus elongate to rounded point, triangulate at base, concave on ventral surface; gnathos oval-quadrate, widest posteriad; valves elongate, tapering to rounded tip, well sclerotized, with spinelike tip on median apex; aedeagus (1.45-1.50mm lg.) tapered to rounded anterior, no secondary cornuti; vesica "L" shaped, with ring of primary cornuti at joint of bend, and additional cluster near terminus.

Female genitalia (fig. 6): segment 8 incompletely sclerotized on dorsal hemisphere; ovipositor lobes strongly sclerotized, ovate, well spined; ductus bursae lightly sclerotized, constricted; corpus bursae a conical sac without distinctive characters.

#### Early Stages:

These are now known for this species, but will be described in detail in a subsequent publication. The cycle is one typical of many species which are active in the autumn of the year. The eggs, laid by the adult in late November-early December, remain as eggs until the following spring. The larva feeds through without pause to maturity. Pupation, in a loose silk cocoon on the surface of the ground, occurs by early summer, remains so until the November period of emergence of the imago.

TABLE 1

Synaxis mosesiani sp. nov.

## List of Paratypes, with data

Paratype no.	Date collected	Location	Sex	Collection location
1	XI-18-1947	So. Pasadena, LA Co. Calif.	f	FPS
2	Emgd. IX-06-1950	Little Daltons Cn., LA Co.	m	FPS
3	Emgd. X-26-1950	" " "	f	LACM
4	Emgd. X-03-1950	Big Daltons Cn., "	m	FPS
5	Emgd. X-05-1950	" " " "	m	LACM
6	Emgd. X-14-1950	" " " "	m	LACM
7	Emgd. XI-05-1962	" " " "	f	AMH
8	XII-09-1963	Carnavon Way, LA Co Calif.	m	AMH
9	X-24-1967	" " "	m	Cornell
10	XII-03-1967	" " "	m	UCB
11	XI-08-1968	" " "	m	USNM
12	X-29-1966	" " "	f	Cornell
13	XI-19-1966	" " "	f	FPS
(conf.; eggs; code=11196601)				
14	Emgd. V-22-1967	" " f-1 of 11196601	f	USNM
15	Emgd. VIII-27-1967	" " " "	f	UCB
16	Emgd. IX-11-1967	" " " "	f	FPS
17	" IX-12-1967	" " " "	m	FPS
18	" IX-16-1967	" " " "	f	FPS
19	" IX-20-1967	" " " "	m	FPS
20	" IX-24-1967	" " " "	f	FPS
21	" IX-29-1967	" " " "	f	LACM
22	" IX-27-1967	" " " "	f	LACM
23	" IX-24-1967	" " " "	f	Yale
24	" IX-24-1967	" " " "	m	Yale
25	" IX-25-1967	" " " "	f	Cal Acad
26	" X-02-1967	" " " "	f	FPS
27	" X-06-1967	" " " "	f	FPS
28	" X-06-1967	" " " "	f	FPS
29	" IX-30-1967	" " " "	f	FPS
30	" IX-29-1967	" " " "	m	Cal Acad
31	" XI-01-1967	" " LA Co Calif.	f	FPS
(conf.; code = 11016701)				
32	" VII-16-1968	" " f-1 of 11016701	f	FPS
33	" IX-10-1968	" " " "	m	FPS
34	" IX-28-1968	" " " "	m	FPS
35	" IX-30-1968	" " " "	m	FPS

## Foodplants:

*Lonicera hispidula*, (Lab) *Ceanothus divaricatus* Nutt., *Salix laevigata*. The latter two plants were offered to larvae in the laboratory; neither has been known to be used as a host in the field.

## Distribution:

Known from the Santa Monica Mts. (Griffith Park area of Los Angeles, Calif.); from the lower Big Dalton's Cn. and adjoining Little Dalton's Cn., Los Angeles County area. Probably ranges throughout the foothill canyon area of the Coastal and intermediate Ranges of southern California.

*Types:*

Holotype: (male)

Carnavon Way, Los Angeles 90027, LA County, Calif. Emgd. Sept. 22, 1967, (F. P. Sala, coll.); LACM.

Allotype: (female)

Carnavon Way, Los Angeles 90027, LA Co. Calif. Emgd. Aug. 29, 1967, (F. P. Sala, coll.); LACM.

There are 35 paratypes included in the type series, in addition to the holotype and allotype. These have been listed on Table I along with their labeled data, and the location where each is to be deposited.

The species is named in honor of my good and valued friend, Mr. Burton Mosesian, of Los Angeles, California, who has from time to time inspired my work in entomology, and whose special appreciation of the art of collecting insects warrants a species bearing his name.

Grateful acknowledgement is due to Mr. Carl Kirkwood, of Summerland, California, who generously donated his notes of related species of the genus *Synaxis* when these were being reviewed. Mr. Ronald Leuschner, of Los Angeles, California, also generously made available his data on related species. Dr. Charles Hogue, Senior Curator of Entomology at the Los Angeles County Museum assisted with the preparation of the genitalia, and made available the special equipment of the Museum to record the genitalia.

## BIBLIOGRAPHY

- BARNES & McDUNNOUGH, 1913. Contributions Vol. II, no. 1, p. 131.  
 \_\_\_\_\_, 1916. Contributions Vol. III, p. 33.  
 HOLLAND, W. J., 1903. The Moth Book, p. 351.  
 HULST, G. W., 1896. *Trans. Amer. Ent. Soc.*, vol. XXIII, p. 374, 375.  
 PACKARD, A. S., 1871. *Proc. Bost. Soc. Nat. Hist.*, vol. 13, p. 386.  
 \_\_\_\_\_, 1874. *Proc. Bost. Soc. Nat. Hist.*, vol. 16, p. 34.